



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/537,917

11/28/2006

Tsutomu Tamura

2356/15

6683

23838 7590 07/02/2007
KENYON & KENYON LLP
1500 K STREET N.W.
SUITE 700
WASHINGTON, DC 20005

EXAMINER

WOODWARD, ANA LUCRECIA

ART UNIT

PAPER NUMBER

1711

MAIL DATE

DELIVERY MODE

07/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/537,917	TAMURA ET AL.	
	Examiner	Art Unit	
	Ana L. Woodward	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 8, 2005
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 5-7, 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-3, 5-7, 9-12 is/are allowed.
- 6) ☒ Claim(s) 4, 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 5,147,944 (Takeda).

Takeda discloses toughened polyamide resin compositions comprising

(A) 100 parts of a mixture composed of 10-90% by weight of a polyamide (A1) from xylylenediamine and an aliphatic dibasic acid and 90-10% by weight of polyamide 6 (A2) and

(B) 5 to 80 parts by weight of an elastomer such as a maleic anhydride modified SEBS block copolymer. In Examples 5 and 6, various formulations meeting the terms of the present claims in term of the type of materials used are set forth. Most of the elastomer particles have

Art Unit: 1711

diameters of about 0.1 to 0.3um and are dispersed in the polyamide (column 11, lines 2-12). It is reasonably believed that the compositions of the reference would possess the same impact strength and permeability properties recited in claim 7 given their chemical similarity to that presently claimed.

The compositions excel in impact strength and exhibit high thermal stability during processing, mechanical strength, chemical resistance, rigidity, etc. They are therefore extremely useful for automobile applications. Given their excellent properties, it would be reasonably expected, by one having ordinary skill, that the reference compositions would necessarily be capable of having the same utility for fuel system parts as the presently claimed products. In this regard, it is noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The onus is shifted to applicants to establish that the product of the present claims is not the same as or obvious from that set forth by the reference.

4. Claims 1, 3, 5-7 and 9-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 6,887,581 (Tamura et al).

Tamura et al disclose laminates for automobile parts, such as fuel tanks, having a layer A made from a composition containing 70-99 wt% of a specific polyamide, such as MXD-6 nylon, and 1-30 wt% of a functionalized ethylene copolymer.

In the examples, various formulations meeting the terms of the present claims in term of the type of materials used are set forth. The polyamide comprises the matrix and the

Art Unit: 1711

functionalized ethylene copolymer comprises the domain component. It is reasonably believed that the compositions of the reference would possess the same impact strength and permeability properties recited in claim 7 given their chemical similarity to that presently claimed. The onus is shifted to applicants to establish that the product of the present claims is not the same as or obvious from that set forth by the reference.

Claim Rejections - 35 USC § 103

5. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,147,944 (Takeda) described hereinabove in view of U.S. 6,887,581 (Tamura et al).

Takeda teaches the production of automobile parts but does not expressly exemplify fuel containers as presently claimed. From Tamura et al the production of automobile parts, such as fuel tanks, etc, from polyamide compositions similar to Takeda's is well known. In light of said teachings, it would have been obvious to one having ordinary skill in the art to have produced automobile parts such as fuel tanks from Takeda's polyamide composition with the reasonable expectation of success.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,887,581 (Tamura et al) described hereinabove.

As regards the particle size of the domain component, it is maintained that by being silent thereto, the reference implicitly suggests that any particle size (inclusive of that claimed) can be satisfactorily used. Accordingly, absent evidence of unusual or unexpected results, no patentability can be seen in the presently claimed particle size.

Art Unit: 1711

Allowable Subject Matter

7. Claims 4 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

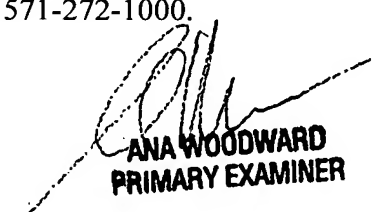
The prior art of record does not disclose or render obvious polyamides comprising meta-xylylenediamine and cyclohexanedicarboxylic acid. Accordingly, the subject matter of claims 4 and 8 is deemed allowable.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


ANA WOODWARD
PRIMARY EXAMINER